

**FOUR-FACTOR ANALYSIS TECHNICAL REPORT  
FOR LIMITED ENGLISH PROFICIENT (LEP) POPULATION IN  
MICHIGAN DEPARTMENT OF TRANSPORTATION PROGRAMS**

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*June 28, 2011*



## Table of Contents

|   |    |
|---|----|
| Introduction.....   | 3  |
| Goal of the Four-Factor Analysis .....                                    | 3  |
| Scope of the Analysis.....  | 3  |
| Methodology .....   | 3  |
| Developing State LEP Baseline Ratio .....                                 | 5  |
| Defining Location Quotient .....  | 6  |
| Using Location Quotient to Determine LEP Significant Counties .....       | 7  |
| Developing LEP Thematic Map in TransCad Program.....                      | 8  |
| Thematic Map of LEP-Significant Counties in Michigan .....                | 10 |
| Analyzing MDOT FY 2012-2016 CFP's for LEP and Title VI Significance ..... | 10 |
| What are EJ-Significant Projects? .....                                   | 11 |
| Recommendation and Conclusion .....                                       | 12 |
| LEP Outcome Performance Measures and Data Gathering.....                  | 13 |
| APPENDIX A.....   | 14 |
| APPENDIX B .....  | 15 |
| APPENDIX C .....  | 16 |

## Introduction

On August 11, 2000, Congress passed the Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency". The Executive Order requires federal agencies to examine the services they provide, identify any need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so LEP persons can have meaningful access to federally funded programs and projects. This document explains MDOT's developed LEP four-factor analysis that outlines the procedures undertaken and consequentially the agency's compliance and adherence to the Executive Order 13166 directives.

## Goal of the Four-Factor Analysis

1. To determine the number of LEP persons eligible to be served or likely to be encountered by MDOT projects and programs in the state Of Michigan.
2. To determine the frequency at which LEP individuals may come in contact with MDOT projects and programs.
3. To emphasize the nature and importance of MDOT projects and programs or services to the lives of LEP population in their areas.
4. To inform and educate LEP population of the resources available to them through MDOT programs and projects.

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Thus, four-factor analysis as analyzed here will be used by MDOT to guide project managers to making informed decisions in the following areas:

- Making informed decisions on how to strategically direct public involvement and participation toward the most needed and most affected Title VI or low-income and minority populations in the state.
- Making informed decisions on what, why, and how to order and distribute brochures to notify the public about MDOT projects and programs
- Making best decisions on how to notify the public of their Title VI rights and how proposed projects and programs may impact them.

## Scope of the Analysis

The scope of this analysis shall be a county level analysis of the 83 counties of the state of Michigan. The analysis will establish a state baseline for the entire state from which inferences can be made.

## Methodology

This analysis relies solely on the U.S. Census Bureau 2005-2009 American Community Survey (ACS) data.

1. Using the American FactFinder Web site, a county-level query, for “B16001...Language Spoken at Home by Ability to Speak English for the Population 5+ Yrs,” was developed and downloaded.
  - a. With a selection for the associated records of population identified by the ACS as people living in such Michigan county with such records labeled by ACS as people that **“Speak English less than very well”** (see appendix A).
2. The query included the following columns of data generated from the ACS report.
  - a. The query pulled the total population of Michigan by county (for the entire 83 counties in Michigan)
  - b. The query was downloaded in excel format for further statistical rendering.
  - c. The query identified the following groups and categories of races as people considered to be speaking English at the status of “less than very well” (see appendix B is a spreadsheet with hiding columns showing people from different nations).
3. For the purpose of developing a statewide threshold, the record for each group’s within each county was summed up for the total aggregate number of people living in each county under the status of “speaking English at less than very well”.
4. The total population by counties also was determined by summing up the total number of people living in each county together, i.e. summing the population column together.
5. The state threshold is therefore determined by dividing the number of people “speaking English less than very well” with the total number of people living in the state of Michigan.
6. A true and fair spread of the population across the state by counties; relative to the state average, was determined by using the Location Quotient (LQ) statistical formula (see Defining Location Quotient).
7. The counties considered to have LQ values greater than one ( $LQ > 1$ ) shall be considered LEP-significant counties.
8. Due consideration shall be accorded to these LEP-significant counties when an MDOT Call for Projects (CFP) is issued and analyses are done.
9. During the annual CFP and the development of the Environmental Justice (EJ) analysis process, due consideration shall be giving to projects

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considered to be EJ-significant that are located within LEP-significant counties.

10. CFP thematic map(s) shall be overlaid on the LEP area map for LEP analysis

11. Project managers shall be informed of the population groups to look out for during project development and outreach programs as well as project implementation phases in order that adequate provisions are made to accommodate the LEP-identified population(s).

### Developing State LEP Baseline Ratio

Using the ACS 2005-2009 data at the county level, the MDOT LEP statistical analysis sums up all the record of populations groups identified in the query to get the total number of LEP populations living in such county. Since the total number of people living in each county is also downloaded, the following equation gives the ratio of LEP populations living in each **county** in the state of Michigan.

**Table 1: Calculating County Level LEP Values**

| County LEP Average                           |   |             |
|--|---|-------------|
| Summation of all LEP persons in Kent County= |   | 31078       |
| Total Number of people in Kent County=       |   | 555890      |
| County LEP Average =                         | $\frac{\text{Total number of people in County speaking English less than "very well"}}{\text{Total number of people in such county}}$ |             |
| Examples:                                    |   |             |
| County LEP Average for Kent County =         | $\frac{31078}{555890}$  | 0.055906744 |
| County LEP Average for Alcona County =       | $\frac{41}{11002}$  | 0.003726595 |

As illustrated in the table below, the State LEP Baseline ratio is developed by dividing the summation value at the county level by the total population of people in the state.

**Table 2: Calculating State Level LEP Baseline Ratio**

| State Level LEP Baseline Ratio  |  |         |             |      |
|---|--|---------|-------------|------|
| Summation of Total Number of LEP people in all Michigan counties=   |  | 320453  |             |      |
| Total population in the state of Michigan (by ACS 2005-2009 data) =   |  | 9406371 |             |      |
| <div>Summation of total number of LEP in all Michigan counties</div> <div>Total population in the state of Michigan</div>   |  |         |             |      |
| State Baseline Ratio =  |  |         |             |      |
|   |  | 320453  |             |      |
| State Baseline Ratio =  |  | 9406371 | 0.034067655 | 3.4% |
| For every 3.4% of state of Michigan's resident sampled in ACS survey, one of them is "speaking English less than very well" |  |         |             |      |

- By the ACS 2005-2009 data, there are approximately 320,453 people living in Michigan considered to be "speaking English less than very well."
- This number represents about 3.4 percent of the population of the state Of Michigan.
- Should any MDOT public outreach involve at least 3.4 percent of the LEP population residents in such county (with representation from groups identified as LEP), the agency would have appropriately met the population threshold requirement.
- For every 3.4 percent of residents in county's considered LEP-significant, adequately involving at least 3.4percent of residents would have been a satisfactory benchmark for public outreach for MDOT programs and plan implementation.
- Outreach for at least 3.4 percent of such population will be considered significant to conforming to Executive Order 13166.

### Defining Location Quotient

Location quotient (LQ) is a statistical technique used in calculating and comparing the share contribution of an areas local economy to another referenced economy. The LQ method also can be defined as a statistical method that strives to show if a local economy has a greater share than expected of a given economy. Using the average of the local economy against the average of the larger economy, the LQ method marks that extra contribution of such local economy as the additional contribution that such local economy is contributing. In this scenario, the LQ method is used to determine whether or not a particular county has a greater share of its LEP populations than expected in the state.

Hence, that local economy having a greater than one (LQ>1) contribution will be recognized as an LEP-significant county in the state.

The statistical notation for the LQ:

$$LQ_i = \frac{\frac{X_i}{n_i}}{\frac{X}{n}} = \frac{X_i}{X} \times \frac{n}{n_i} \quad (1)$$

### Using Location Quotient to Determine LEP Significant Counties

The LQ as used in this analysis (and exemplified in the following illustrative examples) helps to determine the true value of the location of LEP populations as related to the total population of the counties.

**Table 3: Examples of Location Quotient Calculation for Counties**

| Examples of Location Quotient Calculation for Counties |  |                              |                             |                                 |         |
|--|--|------------------------------|-----------------------------|---------------------------------|---------|
| $X_i$  | Summation of all LEP-identified groups of population by ACS data |                              |                             |                                 |         |
| $n_i$  | Total population in the county                                   |                              |                             |                                 |         |
| $X$  | Total number of LEP population in the state of Michigan          |                              |                             |                                 |         |
| $n$  | Total Number of population in the state of Michigan              |                              |                             |                                 |         |
| Counties   | Total pop. ( $n_i$ )   | LEP pop. in county ( $X_i$ ) | Total pop. in state ( $n$ ) | Total LEP pop. in state ( $X$ ) | LEPT LQ |
| Kent County  | 555890   | 31078                        | 9406371                     | 320453                          | 1.64    |
| Oceana County  | 25792  | 1336                         | 9406371                     | 320453                          | 1.52    |
| Wayne County   | 1843082  | 94842                        | 9406371                     | 320453                          | 1.51    |
| Barry County   | 55281  | 323                          | 9406371                     | 320453                          | 0.17    |
| Shiawassee County                                      | 67117  | 383                          | 9406371                     | 320453                          | 0.17    |
| Ontonagon County                                       | 6677   | 37                           | 9406371                     | 320453                          | 0.16    |
| Source: U.S Census Bureau, ACS 2005-2009               |  |                              |                             |                                 |         |

The resulting values of the calculations made above are interpreted in the following statistical ways:

**LQ < 1.0:** Such counties having LEP populations considered insignificant enough to be designated as LEP-significant counties (see LEP LQ numbers for Barry, Shiawassee and Ontonagon counties in the examples above). This



implies that such counties having values less than one have insufficient Title VI population considered “Speaking English less than “very well”.

**LQ = 1.0:** Such block groups have populations that are just sufficient enough to be considered as LEP-significant counties.

**LQ > 1.0:** Such counties with LEP LQ greater than one provides evidence that these counties have concentrations of racial populations that are greater than what other counties have in their county boundaries (see LEP LQ numbers for Kent, Oceana, and Wayne counties in the examples above). These counties are considered LEP-significant counties and would represent the selection set considered being LEP-significant areas in the thematic map analysis.

In light of the calculations above and the statistical findings, it is safe to conclude that:

1. For every 3.4 percent of the time, it is strongly likely to encounter Title VI populations with LEP status of “speaking English at less than very well” in the 10 counties identified on appendix C as having LEP LQ >1.
2. If projects identified as EJ-significant projects exist in the identified 10 counties, it is strongly likely that projects of EJ significance may have appreciable impact(s) on LEP populations in the identified 10 counties than in others having LEP LQ<1.
3. It is therefore highly recommended that program managers in the 10 counties pay particular attention to methods of engaging and involving LEP populations in such counties.

The following checklists of questions, though not exhaustive, are provided as a guide to program managers and project implementation officers to help identify what could likely be a project of LEP significance.

### Developing LEP Thematic Map in TransCad Program

The ACS data shall be saved as a database file and imported into the TransCad geographic system information program for mapping and analytical purposes. Using the LEP LQ column of the database, a thematic map shall be generated to show three levels of LEP populations in Michigan.

1. LEP areas of High Significance
2. LEP areas of Medium Significance
3. LEP areas of Low significance

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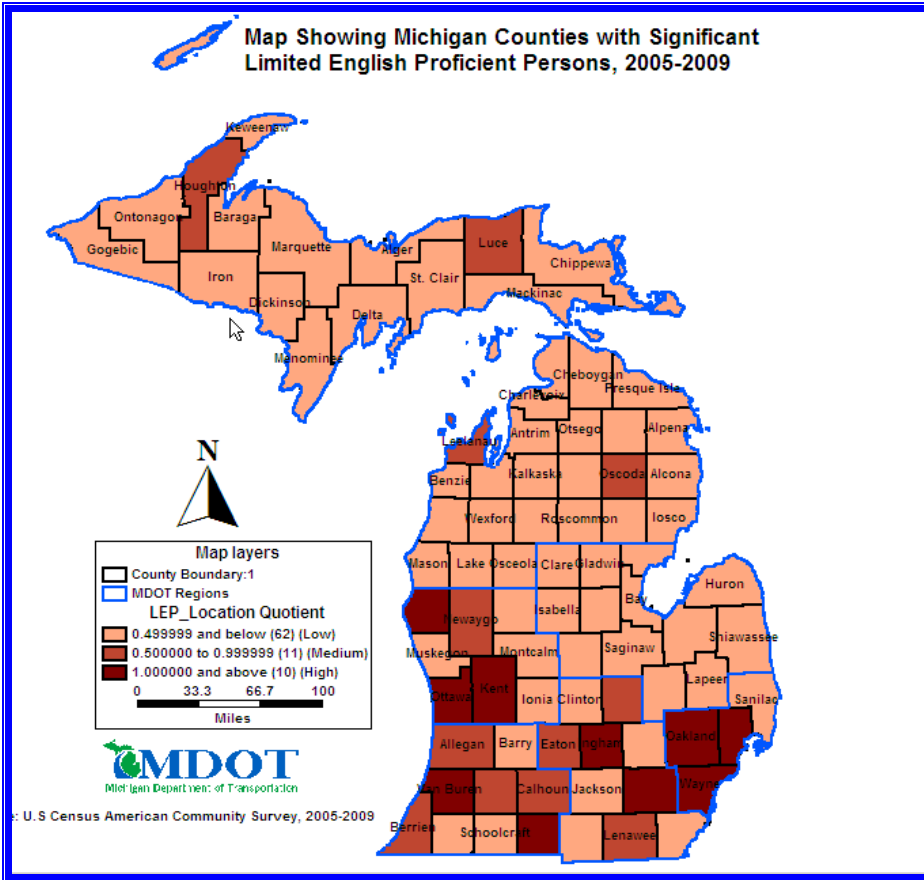
The LEP thematic map shall work closely with the EJ evaluation analysis map on MDOT annual CFP analysis that specifically screens projects as to whether they are “Categorical Exclusion” projects or “EJ-significant” projects.

Categorical Exclusion (CE) projects are defined as projects that do not individually or cumulatively have significant effect on the human environment ... and ... for which, therefore, neither an environmental assessment nor an environmental impact statement is required. Primary work type definition of such projects include road resurfacing, restore and rehabilitate, bridge or deck replacement, capital preventive maintenance, traffic operations/safety and such other projects covered under the FHWA certified CE checklist of projects.

EJ-significant projects are defined as projects that may individually or cumulatively have significant effects on the human health or social environment and for which environmental assessment and/or environmental impact statements are required. Primary work type definition of such project includes new road or new route capacity improvements, minor and major capacity improvements and such projects that may include property condemnation or acquisitions and/or takings, or major right of way acquisition.

If projects considered as EJ-significance exist within an LEP-significant county, the information shall reflect on the map overlay and be subsequently shared with the MDOT Equal Employment Opportunity Officer (EEO), Civil Rights Programs Unit to ensure that adequate attention, procedures and resources are deployed to mitigate and adequately address any adverse or consequential impact that cumulates to conforming with and adhering to all existing federal and state regulations.

## Thematic Map of LEP Significant Counties in Michigan



## Analyzing MDOT FY 2012-2016 CFPs for LEP and Title VI Significance

Evaluating for EJ and LEP populations are two mutually related endeavors with both analyses looking at similar population data/cohorts to provide information on how to best involve and mitigate minority, low-income and Title VI population concerns. In the next update to the annual MDOT EJ CFP analysis, the LEP report will be incorporated as a mutual part of the full MDOT EJ CFP report because both analyses are mutually reinforcing and strengthening. Hence, this part of the analysis shall focus on one specific analytical finding(s) titled EJ-significant projects, as identified in the MDOT annual EJ CFP analysis. The emphasis will be to use this finding(s) to draw reasonable conclusions and inferences on the likely impact of MDOT projects and programs on LEP populations in Michigan.

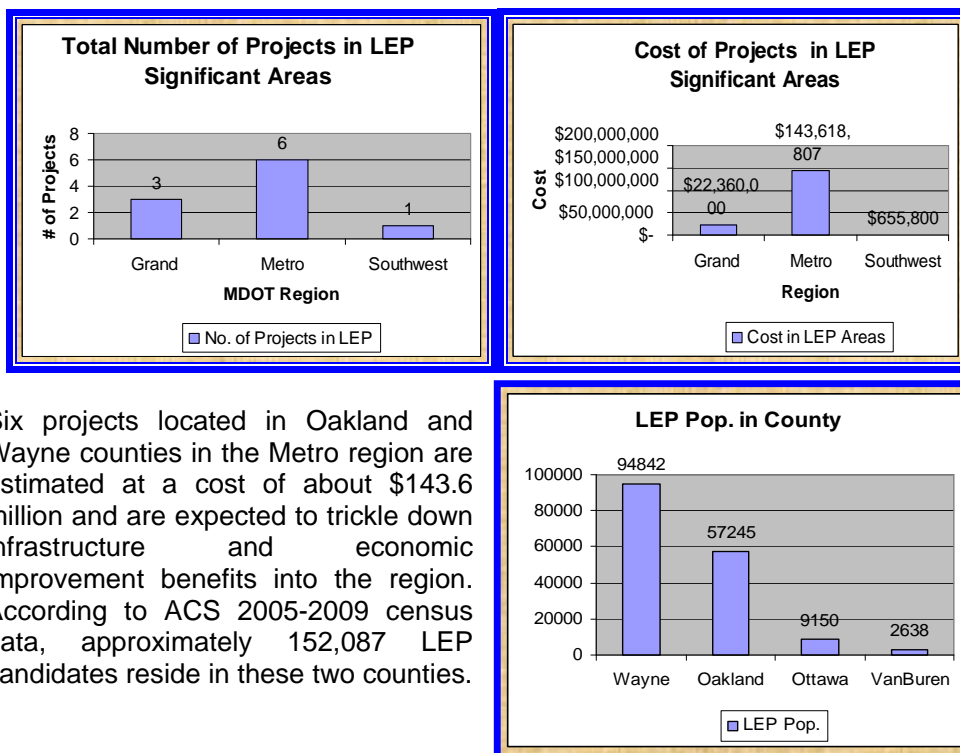
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## What are EJ-Significant Projects?

EJ-significant projects consist of projects that may individually or cumulatively have significant effects on the human health or social environment, and for which environmental assessment and/or environmental impact statements are required. The primary work-type definition of such projects includes new road or new route capacity improvements, minor and major capacity improvements, and such projects that may include property condemnation or acquisitions and/or takings, or the acquisition of major right of way. As reported in the technical report of the MDOT FY 2012 - 2016 EJ analysis and by the defining standard stated above, the following list of projects (see Appendix C) were identified as EJ-significant projects in the LEP-significant counties. The inserted highlights show projects located in Michigan counties having LEP LQ >1 and considered as EJ-significant counties (see Appendix B, column labeled LEP\_LQ).

According to the table and as stated in the charts (1, 2 & 3) below, three projects in the Grand Region (two on M-104 and one on US-31) are located in Ottawa County. The estimated cost of these three projects is estimated at about \$22.3 million. These projects are expected to bring economic benefits and developmental impact to the Grand Region and it's expected to impact about 9,150 LEP populations in the county.

### Charts 1, 2 & 3 LEP Significant Projects Statistics



Six projects located in Oakland and Wayne counties in the Metro region are estimated at a cost of about \$143.6 million and are expected to trickle down infrastructure and economic improvement benefits into the region. According to ACS 2005-2009 census data, approximately 152,087 LEP candidates reside in these two counties.

The impact of the various utility relocation and right-of-way phases of the New International Trade Crossing (NITC) project, a collaboration project with the country of Canada, are identified to be significant projects by the adopted definition. Though the total cost of construction is yet to be known, the NITC project will mark the beginning of a major project that should be closely monitored for adequate adherence to Title VI requirement and conformity to the needs of LEP population. The construction phase of the NITC project, which is still in the outer years of the planning cycle, also needs to be closely monitored. Further information on the NITC project can be found at <http://partnershipborderstudy.com/>. One project in the Southwest Region on M-40 in Van Buren County, a minor widening project for add turn lane, is estimated at about \$0.67 million. This project is expected to have little or no significant impact on the 2,638 LEP or Title VI populations identified to be residents in the county.

## Recommendation and Conclusion

This report and the information therein are considered as public information, and should be shared and distributed appropriately, with:

- MDOT officers involved in project design, project development, and project implementation and such groups or citizen groups to whom this information can benefit.
- MDOT personnel's coordinating public outreach and involvement should disseminate information on how MDOT projects and programs or services will benefit the lives of LEP population in their areas.
- The information shared should be tailored towards educating the public on how and where MDOT LEP resources are located and how to access them.
- Information about these projects and their geographic location have been shared with MDOT EEO, Civil Rights Programs Unit for further monitoring and coordination of services that will considerably improve the participation and involvement opportunities of all Title VI populations and LEP groups in the state Of Michigan.

In conclusion, as set out in the four goals of the report, the Title VI group identified as people "speaking English at less than very well" are spread out in every county of Michigan. However, the pattern of spread is uniquely following the hypothesis that the larger the population, the greater the number of people residing there that can be classified as speaking English less than very well. The methodology employed in this study points to the following facts:

| County           | LEP_LQ      |
|------------------|-------------|
| Kent County      | 1.641050565 |
| Oceana County    | 1.520474708 |
| Wayne County     | 1.510475927 |
| Macomb County    | 1.49851594  |
| Oakland County   | 1.486957073 |
| Ingham County    | 1.313349012 |
| Washtenaw County | 1.253273753 |
| Ottawa County    | 1.116352333 |
| Van Buren County | 1.065529409 |
| Branch County    | 1.007149414 |

1. About 80 percent of the time, counties identified as having significant LEP populations are such counties located in the urbanized area of the state.
2. 100 percent of the counties identified are located in the central and southern half of the state with the largest population concentration.
3. For every project implemented within LEP significant county(s), it is strongly likely that an upper limit of 5.6 percent and a lower limit of 3.4 percent LEP persons could be encountered.
4. Directing strategic planning effort and well-coordinated outreach program in these identified counties will produce greater result and public recognition of MDOT programs across the state.

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## LEP Outcome Performance Measures and Data Gathering

On a two-year cycle basis, and based on the four goals identified by Executive Order 13166 above, the following performance measures shall be considered for future evaluation of the implementation outcome of LEP outreach effort on MDOT programs and projects:

1. MDOT region staffs shall document and share all records of public outreach provided to LEP populations in their areas. Such records shall include the type of public outreach employed (e.g. mailing, brochures, e-mails, Web site, churches or social gatherings used to circulate awareness; the number and locations of such meeting venues; meeting attendance worksheets that strive to collect data on LEP populations in attendance. The questionnaire for collecting such data can be requested from the MDOT office of EEO, Civil Rights Program Unit.
2. The TranScad Geographic Information Systems shall be used to determine the LEP-eligible persons encountered by MDOT projects and programs based on most recent U.S. Census data.
3. A statistical formula shall be used to determine the frequency at which LEP persons are encountered during the implementation of MDOT projects and programs.
4. The bi-annual report shall be made available on MDOT Web site for public viewing and accessibility.

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## APPENDIX A

| ACS Identified Population with LEP Status |                                 |    |                                       |
|---|---------------------------------|----|---------------------------------------|
| 1   | Spanish or Spanish Creole       | 21 | Other Indo-European languages         |
| 2   | French (incl. Patois, Cajun)    | 22 | Chinese                               |
| 3   | French Creole                   | 23 | Japanese                              |
| 4   | Italian                         | 24 | Korean                                |
| 5   | Portuguese or Portuguese Creole | 25 | Mon-Khmer, Cambodian                  |
| 6   | German                          | 26 | Hmong                                 |
| 7   | Yiddish                         | 27 | Thai                                  |
| 8   | Other West Germanic languages   | 28 | Laotian                               |
| 9   | Scandinavian languages          | 29 | Vietnamese                            |
| 10  | Greek                           | 30 | Other Asian languages                 |
| 11  | Russian                         | 31 | Tagalog                               |
| 12  | Polish                          | 32 | Other Pacific Island languages        |
| 13  | Serbo-Croatian                  | 33 | Navajo                                |
| 14  | Other Slavic languages          | 34 | Other Native North American languages |
| 15  | Armenian                        | 35 | Hungarian                             |
| 16  | Persian                         | 36 | Arabic                                |
| 17  | Gujarati                        | 37 | Hebrew                                |
| 18  | Hindi                           | 38 | African languages                     |
| 19  | Urdu                            | 39 | Other and unspecified languages       |
| 20  | Other Indic languages           |    |                                       |

Source: U.S. Census Bureau American Community Survey, 2005-2009

## APPENDIX B

| GEO_NAME          | B16001_1_EST | B16001_5_EST              | B16001_8_EST                  | B16001_11_EST | B16001_14_EST |                  |             |                   |
|-------------------|--------------|---------------------------|-------------------------------|---------------|---------------|------------------|-------------|-------------------|
| Geography         | Total:       | Spanish or Spanish Creole | French (incl. Patois, Cajun): | French Creole | Italian:      | Total < LEP Pop. | LEP_LQ      | Outreach Estimate |
| Kent County       | 555890       | 21828                     | 174                           | 8             | 118           | 31078            | 1.641050565 | 5.6%              |
| Oceana County     | 25792        | 1195                      | 7                             | 0             | 0             | 1336             | 1.520474708 | 5.2%              |
| Wayne County      | 1843082      | 35265                     | 1544                          | 12            | 1345          | 94842            | 1.510475927 | 5.1%              |
| Macomb County     | 778458       | 3983                      | 519                           | 17            | 3210          | 39741            | 1.49851594  | 5.1%              |
| Oakland County    | 1130048      | 11371                     | 1130                          | 14            | 903           | 57245            | 1.486957073 | 5.1%              |
| Ingham County     | 261428       | 3269                      | 147                           | 151           | 86            | 11697            | 1.313349012 | 4.5%              |
| Washtenaw County  | 325463       | 2825                      | 863                           | 10            | 103           | 13896            | 1.253273753 | 4.3%              |
| Ottawa County     | 240590       | 5967                      | 76                            | 0             | 57            | 9150             | 1.116352333 | 3.8%              |
| Van Buren County  | 72672        | 2354                      | 20                            | 0             | 41            | 2638             | 1.065529409 | 3.6%              |
| Branch County     | 43018        | 752                       | 32                            | 0             | 28            | 1476             | 1.007149414 | 3.4%              |
| St. Joseph County | 57551        | 1423                      | 4                             | 0             | 0             | 1919             | 0.978768227 | 3.3%              |
| Leelanau County   | 20915        | 451                       | 21                            | 0             | 9             | 579              | 0.812603067 | 2.8%              |
| Berrien County    | 149607       | 2300                      | 102                           | 0             | 57            | 4136             | 0.81149599  | 2.8%              |
| Newaygo County    | 45882        | 796                       | 15                            | 3             | 0             | 1178             | 0.753634397 | 2.6%              |
| Allegan County    | 105181       | 2254                      | 54                            | 0             | 0             | 2647             | 0.738710731 | 2.5%              |
| Oscoda County     | 8518         | 7                         | 0                             | 0             | 0             | 204              | 0.702991856 | 2.4%              |
| Calhoun County    | 127677       | 1391                      | 13                            | 0             | 11            | 2894             | 0.665339978 | 2.3%              |
| Houghton County   | 33261        | 92                        | 10                            | 0             | 11            | 724              | 0.638941396 | 2.2%              |
| Lenawee County    | 94663        | 1655                      | 56                            | 0             | 0             | 2051             | 0.635979561 | 2.2%              |
| Luce County       | 6354         | 87                        | 3                             | 0             | 0             | 133              | 0.614415542 | 2.1%              |
| Kalamazoo County  | 229614       | 1987                      | 223                           | 0             | 0             | 4190             | 0.535640517 | 1.8%              |
| Eaton County      | 100928       | 673                       | 34                            | 14            | 0             | 1743             | 0.506924734 | 1.7%              |
| Lapeer County     | 86379        | 1068                      | 23                            | 0             | 14            | 1424             | 0.483904409 | 1.6%              |
| Isabella County   | 63145        | 437                       | 12                            | 0             | 6             | 1034             | 0.480661496 | 1.6%              |
| Muskegon County   | 162513       | 1851                      | 46                            | 0             | 0             | 2473             | 0.446677186 | 1.5%              |
| Mackinac County   | 10364        | 52                        | 19                            | 0             | 0             | 155              | 0.438997509 | 1.5%              |
| Cass County       | 47762        | 432                       | 12                            | 0             | 0             | 699              | 0.429588289 | 1.5%              |
| Clinton County    | 65328        | 521                       | 43                            | 0             | 0             | 943              | 0.423711345 | 1.4%              |
| Saginaw County    | 190174       | 1387                      | 74                            | 0             | 7             | 2628             | 0.405631788 | 1.4%              |
| Montcalm County   | 58675        | 335                       | 33                            | 0             | 3             | 810              | 0.40521889  | 1.4%              |
| Alger County      | 9079         | 20                        | 3                             | 0             | 15            | 120              | 0.387972544 | 1.3%              |
| Iosco County      | 25180        | 133                       | 16                            | 0             | 4             | 324              | 0.377700054 | 1.3%              |
| Genesee County    | 403219       | 1412                      | 278                           | 9             | 19            | 5113             | 0.372213882 | 1.3%              |
| Menominee County  | 23085        | 40                        | 22                            | 0             | 5             | 290              | 0.36874478  | 1.3%              |
| Livingston County | 171690       | 804                       | 129                           | 0             | 36            | 2109             | 0.360569794 | 1.2%              |



## APPENDIX C

|      |            |            |      |           |   |   |  |               |        |   |
|------|------------|------------|------|-----------|---|---|--|---------------|--------|---|
| 2012 | ST. CLAIR  | Metro      | MDOT | M-29      | at Michigan Road, city of Marysville              | Widen - minor                           | Construct center-turn lane on M-29 and Michigan CMAQ Grant Number #11049 | \$ 500,000    | 112485 |   |
| 2012 | WAYNE      | Metro      | MDOT | NITC      | at I-75 Interchange, Plaza and Bridge             | New route/structure (capacity increase) | Development of the P3 proposal for concessionaire                        | \$ 14,000,000 | 113693 | American Indian, Black, Hispanics, Low-income |
| 2012 | WAYNE      | Metro      | MDOT | NITC      | at NITC Plaza                                     | New route/structure (capacity increase) | ROW and utility relocation design  | \$ 3,000,000  | 113716 | American Indian, Black, Hispanics, Low-income |
| 2012 | WAYNE      | Metro      | MDOT | NITC      | at NITC Plaza                                     | New route/structure (capacity increase) | ROW and utility relocation design  | \$ 16,000,000 | 113716 | American Indian, Black, Hispanics, Low-income |
| 2012 | WAYNE      | Metro      | MDOT | NITC      | at the NITC / I-75 Interchange                    | New route/structure (capacity increase) | PE and utility relocation design work at I-75                            | \$ 17,000,000 | 113717 | American Indian, Black, Hispanics, Low-income |
| 2012 | WAYNE      | Metro      | MDOT | NITC      | at the NITC / I-75 Interchange                    | New route/structure (capacity increase) | PE and utility relocation design work at I-75                            | \$ -          | 113717 | American Indian, Black, Hispanics, Low-income |
| 2013 | ST. CLAIR  | Metro      | MDOT | M-25/Pine | M-25/Pine Grove Avenue                            | New route/structure (capacity increase) | Relocation of M-25   | \$ 30,800,000 | 106607 | American Indian, Hispanics, Low-income        |
| 2015 | OAKLAND    | Metro      | MDOT | I-75      | North Perimeter Road Interchange to north of M-24 | Widen - major (capacity increase)       | Reconstruct interchange and CD roadways                                  | \$ 93,618,807 | 31673  | American Indian Asian, Hispanics              |
| 2012 | OGEMAW     | North      | MDOT | M-55/I-75 | I-75 BL from Husted to Gray Road                  | Widen - major (capacity increase)       | Add center left-turn lane  | \$ 1,461,775  | 109229 | Asian, Low-income                             |
| 2013 | EMMET      | North      | MDOT | US-31     | Townsend to Eppler                                | Widen - major (capacity increase)       | Widening for center left-turn lane FY 2015                               | \$ 20,000     | 113598 | American Indian Low Income                    |
| 2015 | EMMET      | North      | MDOT | US-31     | Townsend to Eppler                                | Widen - major (capacity increase)       | Widening for center left-turn lane FY 2015                               | \$ 3,501,946  | 113598 | American Indian, Low-income                   |
| 2012 | BERRIEN    | Southwest  | MDOT | US-12     | 1.5 miles east of I-94                            | Widen - minor                           | Left-turn lane   | \$ 228,800    | 108015 |   |
| 2012 | CASS       | Southwest  | MDOT | US-12     | Gumwood Road                                      | Widen - minor                           | Left-turn lane   | \$ 743,000    | 106876 |   |
| 2012 | ST. JOSEPH | Southwest  | MDOT | US-131    | St. Joseph County                                 | New route/structure (capacity increase) | Design and Construction of PA-5  | \$ 23,829,999 | 46269  | American Indian, Low-income                   |
| 2013 | ST. JOSEPH | Southwest  | MDOT | M-86      | Nottawa Street to Shimmet Road                    | Widen - minor                           | Revise lane configuration  | \$ 468,791    | 110521 | American Indian, Low-income                   |
| 2013 | VAN BUREN  | Southwest  | MDOT | M-40      | M-40 at 64th Avenue and 31st Street               | Widen - minor                           | Added left-turn lane   | \$ 655,800    | 106875 | Hispanics                                     |
| 2012 | HOUGHTON   | Superior   | MDOT | M-26      | M-26, Houghton County                             | New route/structure (capacity increase) | Re-align existing curve  | \$ 729,300    | 110596 | Low-income                                    |
| 2014 | LUCE       | Superior   | MDOT | M-28      | Adjacent to Luce Co Airport                       | New route/structure (capacity increase) | Construct new PITWS  | \$ 102,095    | 110632 | American Indian, Low-income                   |
| 2016 | CHIPPEWA   | Superior   | MDOT | M-28      | west of I-75 at Dafer TST                         | New route/structure (capacity increase) | Construct new PITWS  | \$ 99,665     | 110631 | American Indian                               |
| 2012 | LIVINGSTON | University | MDOT | I-96      | Lafson Road interchange                           | New route/structure (capacity increase) | Nonmotorized path  | \$ 2,000,000  | 113283 | American Indian                               |

Source: MDOT CFP Technical Report, FY2012 - 2016, June 2011